

# Tobacco Use Prevention Among Youth and Young Adults: Focus on E-cigarettes

## NC Courts Commission

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NC Division of Public Health

October 18, 2019

# Agenda

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- Landscape of Tobacco Use
- Epidemic of E-cigarette Use and Health Impacts
- Recommended Interventions per Surgeon General's Advisory
- Questions

# The Burden of Tobacco Use in NC

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Smoking costs  
North Carolina  
**\$3.81 billion**  
per year in  
health care costs



Including  
**\$931 million**  
in **Medicaid** costs.

There is an additional  
annual cost of  
**\$293 million**  
from health problems  
due to **secondhand smoke**.



The Health Consequences  
of Smoking—50 Years of Progress

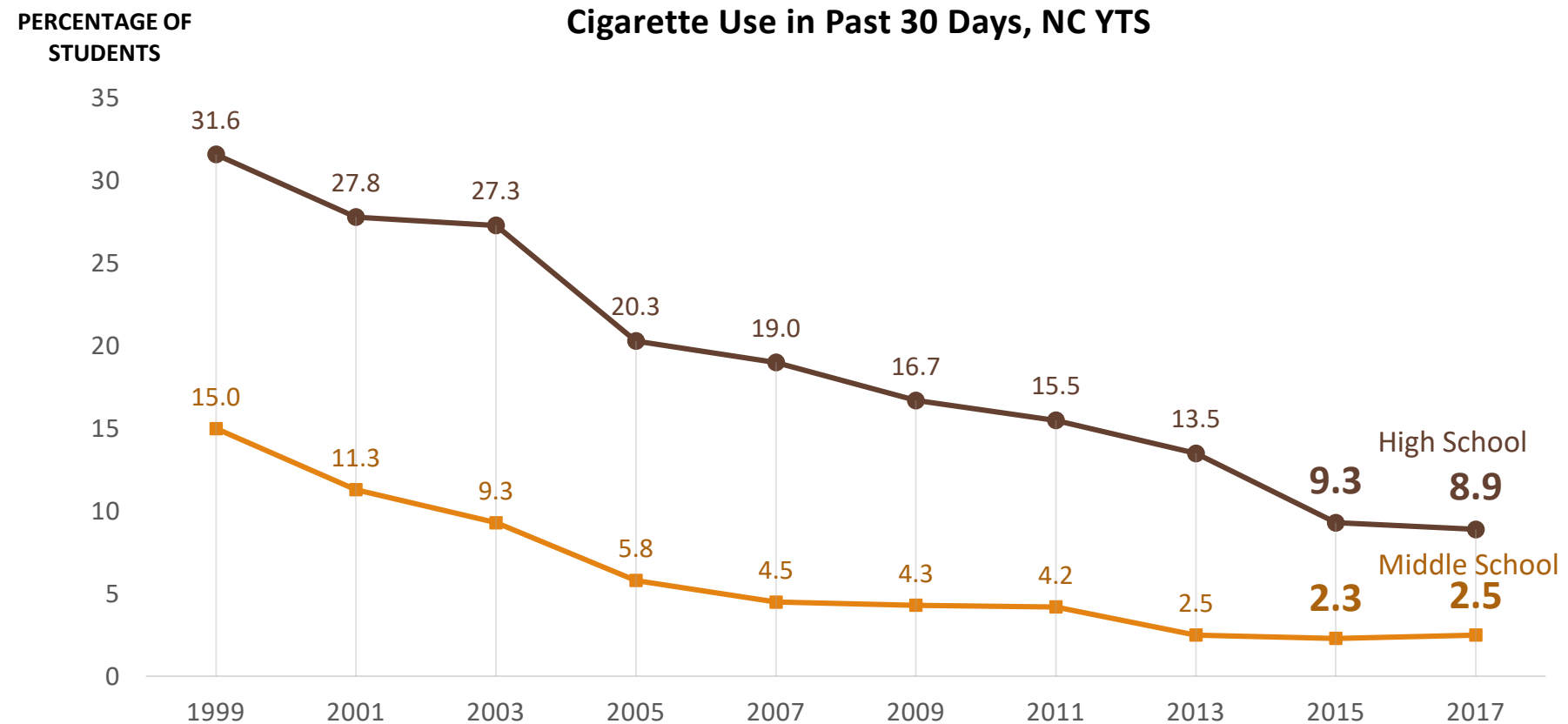
A Report of the Surgeon General



U.S. Department of Health and Human Services

**90%**  
**of tobacco users  
start before the age  
of 18**

# Youth Cigarette Smoking has Declined 1999-2017

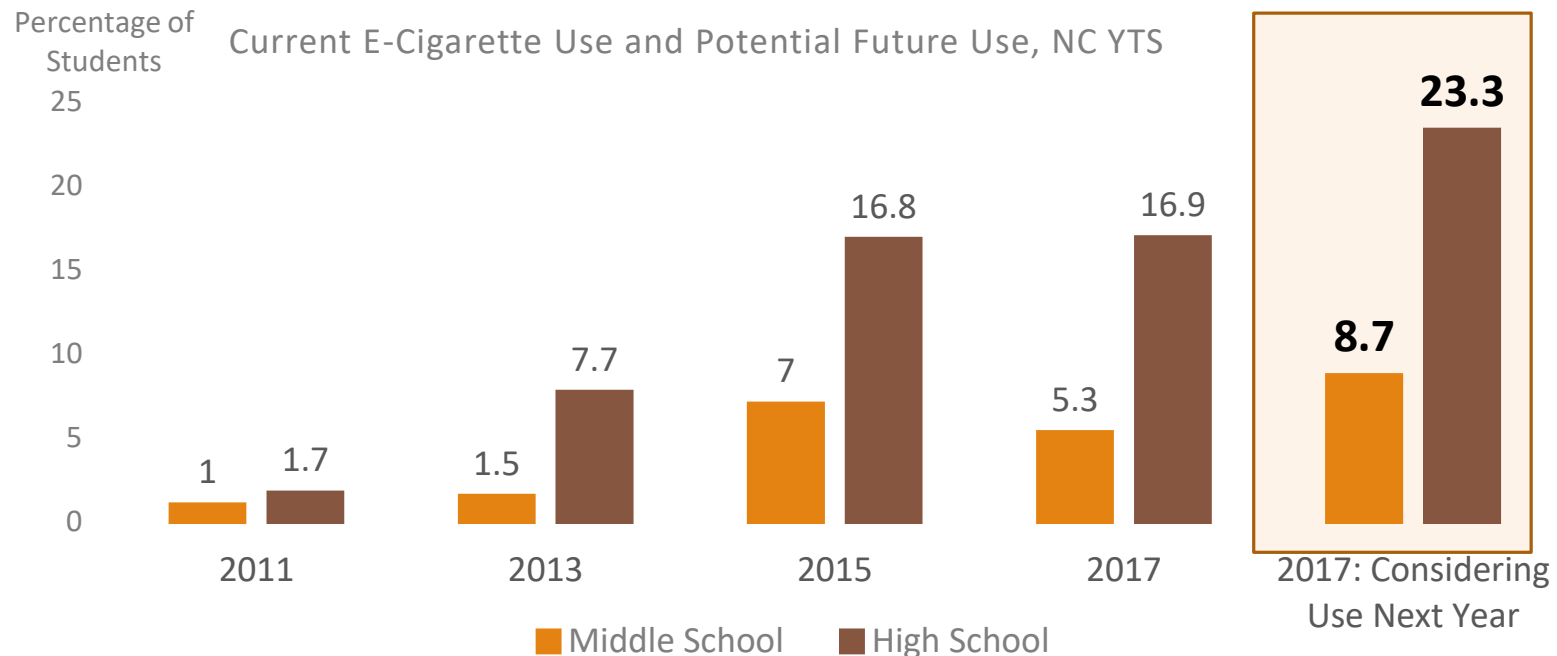


## Between 2011-2017 Current Youth Use of E-Cigarettes Increased:

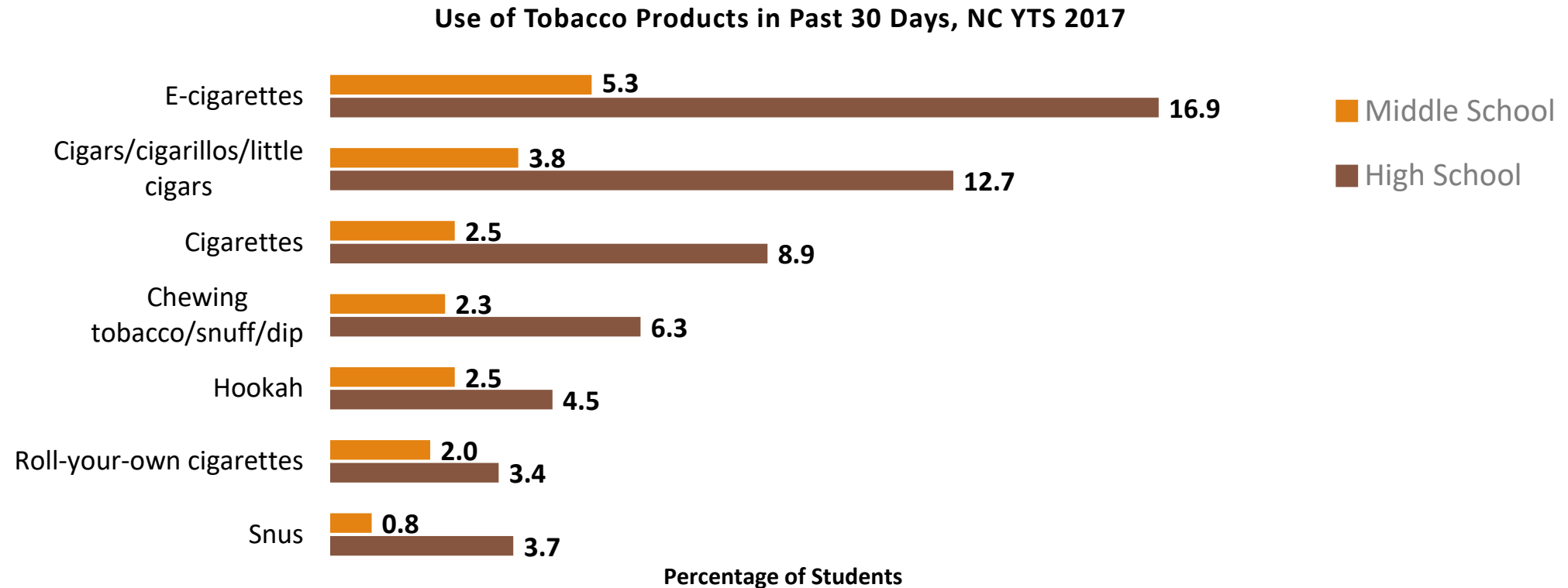
430% ↑  
Middle School

894% ↑  
High School

In 2017 more students said they were considering using e-cigarettes in the next year than currently used them



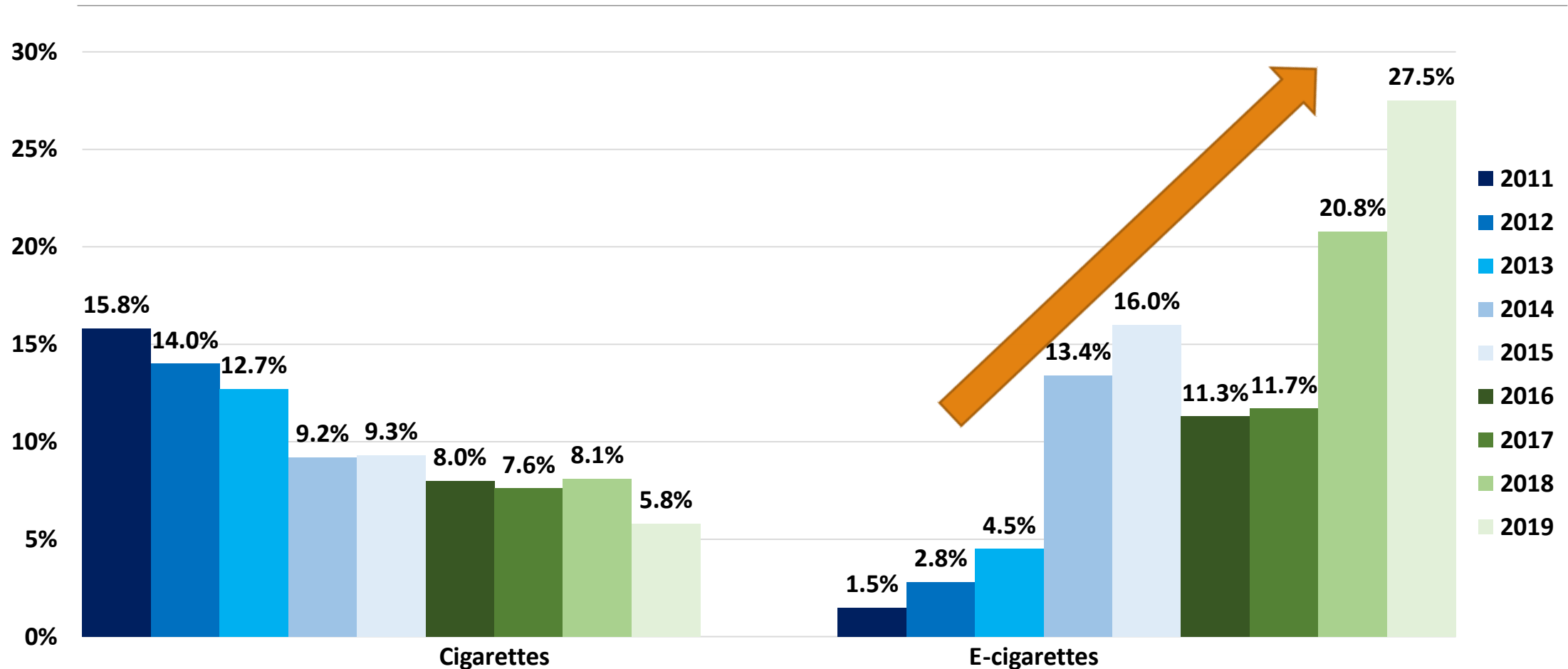
# E-cigarettes are Still the #1 Product Used by Youth





# Use of Cigarettes has Declined...but Reversed by Increase in E-cigarette Use

Percent of US high school students who reported cigarette or e-cigarette use in the past 30 days



**Luka Kinard, 16, of  
High Point**



# Types of E-Cigarettes



Disposables



Rechargeable –  
Replacement Cartridges



Rechargeable –  
Refillable Tank System



Mods



USB-Style

# JUUL Popular Among Youth

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- Resembles a flash drive
- Each pre-filled pod is equal to about 1 pack of cigarettes. Reviews of the product suggest about 200 puffs.
- Marketed in several flavors  
e.g. Mango, Fruit, Crème







## The vape company Juul said it doesn't target teens. Its early ads tell a different story.

A new analysis of Juul's marketing campaign suggests it targeted youth from its inception.

By Julia Belluz | @juliaoftoronto | [julia.belluz@voxmedia.com](mailto:julia.belluz@voxmedia.com) | Jan 25, 2019, 9:10am EST

# Advertising and Flavors Entice Youth to Start Using E-cigarettes, the Nicotine Hooks Them

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## JUUL PODS & FLAVORS

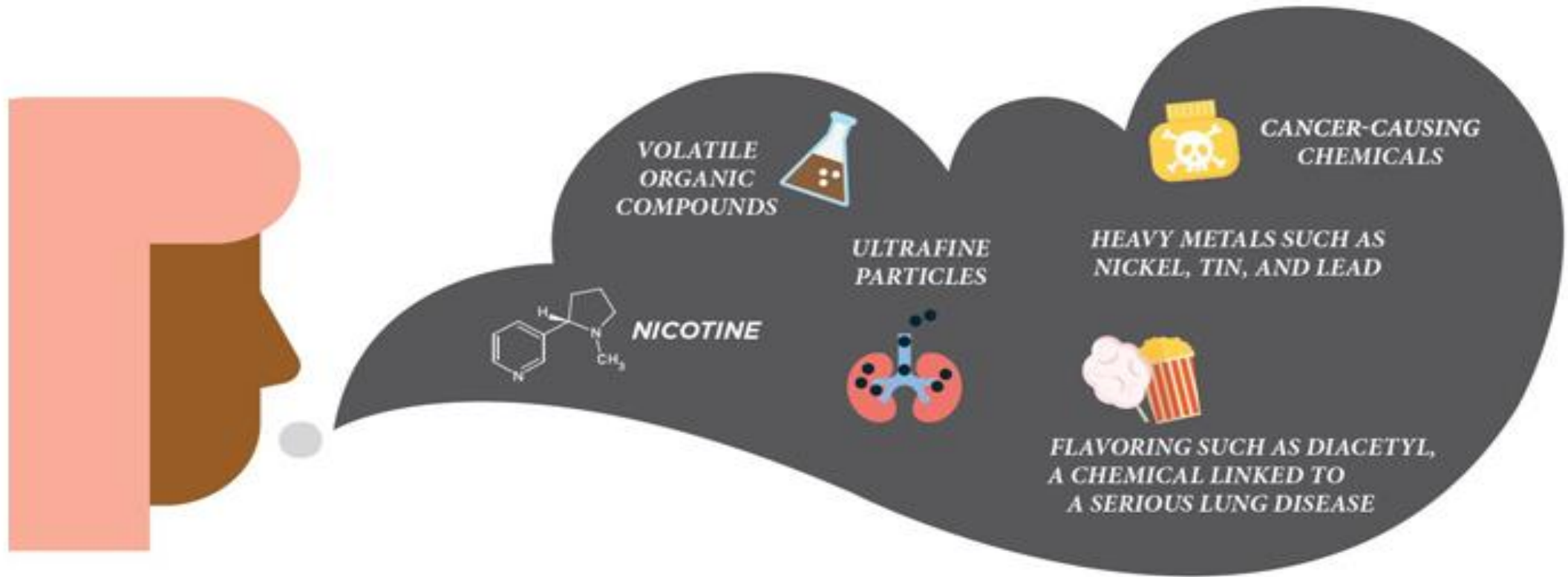


## NICOTINE LEVELS





# It's an Aerosol, Not a Vapor



# Nicotine Poses Unique Dangers to the Developing Human

Nicotine is toxic to developing fetuses and impairs fetal brain and lung development

Poisonings occur among users via ingestion of nicotine liquid, absorption through skin, and inhalation

Nicotine use while adolescent brain is developing can disrupt brain circuit formation

And associated with combustible tobacco use as well



# We Conducted a Study in Collaboration with CDC

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**Online survey of  
574 school staff**



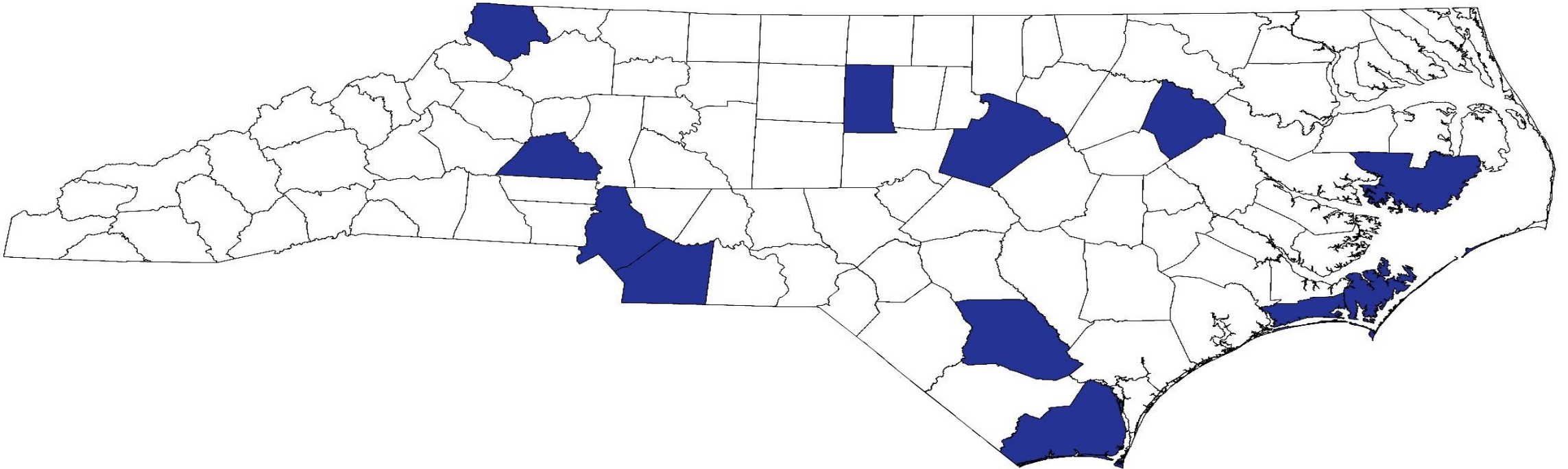
**35 in-person semi-  
structured interviews  
with school staff**



**Environmental assessment:  
collect e-cigarettes and  
identify e-cigarette retailers  
near schools**

# We Visited 12 High Schools Across the State

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# Most School Staff Reported that E-cigarettes are Somewhat or very...

Percent of school staff

Problematic 88%

Harmful 95%

Contributory to learning disruptions 84%

High priority issue for school administration 90%



# Lung Injury Associated with E-cigarette Use: National Investigation

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- 1,299 cases have been reported nationally (as of Oct 8)
- 26 deaths have been reported in 21 states
- All patients reported e-cigarette use or vaping
- 15% under 18; 21% are 18-20
- Among 573 patients with information on substances used in the 3 months prior:
  - About 76% reported using THC-containing products (about 32% exclusive use).
  - About 58% reported using nicotine-containing products (about 13% reported exclusive nicotine product use).

# Lung Injury Associated with E-cigarette Use: North Carolina Investigation

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- 54 cases (41 confirmed and 13 probable case patients as of 10/16/19)
- 7 more under investigation
  - Age range 13-72
  - Majority male and young adults
  - Patients present with various symptoms including:
    - Shortness of breath and cough
    - Chest pain
    - Nausea, vomiting, fever
  - Most patients have been hospitalized and require respiratory support

# CDC Recommends Regardless of the Ongoing Investigation:

- Anyone who uses e-cigarette, or vaping, products should not buy these products (e.g., e-cigarette or vaping products with THC or CBD oils) from informal sources (e.g. friends, family members) or “off the street,” and should not modify or add any substances to these products that are not intended by the manufacturer.
- Youth and young adults should not use e-cigarette or vaping products.
- Women who are pregnant should not use e-cigarette or vaping products.
- Adults who do not currently use tobacco products should not start using e-cigarette or vaping products.
- THC use has been associated with a wide range of health effects, particularly with prolonged heavy use. The best way to avoid potentially harmful effects is to not use THC, including through e-cigarette, or vaping products. Persons with marijuana use disorder should seek evidence-based treatment by a health care provider.

# How to Keep Up with the Latest Information?

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## **National Investigation:**

MMWR about the Multi-State Outbreak:

<https://www.cdc.gov/mmwr/volumes/68/wr/pdfs/mm6839e1-H.pdf>

CDC: [www.cdc.gov/lunginjury](http://www.cdc.gov/lunginjury)

## **North Carolina Investigation:**

Case Counts updated weekly at:

<https://www.tobaccopreventionandcontrol.ncdhhs.gov/ecigs>

# Recommended Interventions

per US Surgeon General Advisory

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# THE FACTS

on e-cigarette use among  
youth and young adults

[Download Surgeon General Advisory](#)[A Message from the Office of the U.S. Surgeon General.](#)[Listen to the Audio PSA](#)[Audio PSA transcript](#)[Share this page](#)



# U.S. Surgeon General Advisory Recommendations

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- Include e-cigarettes in smoke-free indoor air policies
- Restrict young peoples' access to e-cigarettes in retail settings (e.g. Tobacco 21)
- License retailers
- Implementing price policies (e.g. tax)
- Developing educational initiatives targeting young people (e.g. media campaigns)
- Implement strategies to curb advertising and marketing that are appealing to young people
- Implement strategies to reduce access to flavored tobacco products by young people

\*And implement strategies to treat adults and youth with nicotine addiction\*

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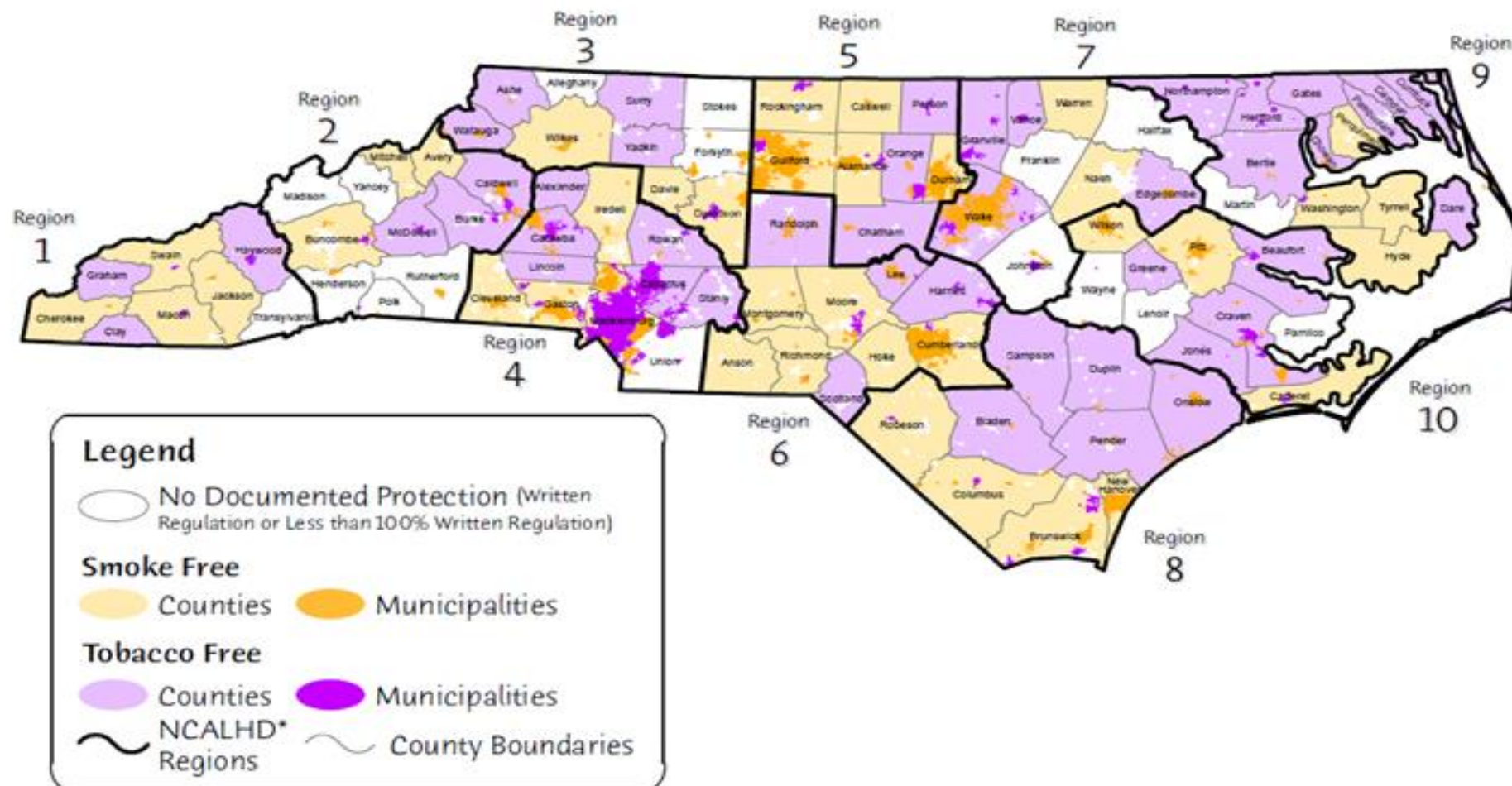
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# North Carolina

## Counties and Municipalities Reporting 100% Smoke-Free or Tobacco-Free Government Buildings



NOTE: Information provided here is from ongoing reporting. Policies presented here are reported to the NC Tobacco Prevention and Control Branch (NC TPCB). If your government entity has a 100% smoke free or tobacco free policy which is not reported here, please contact NC TPCB at 919-707-5400. \*North Carolina Association of Local Health Directors

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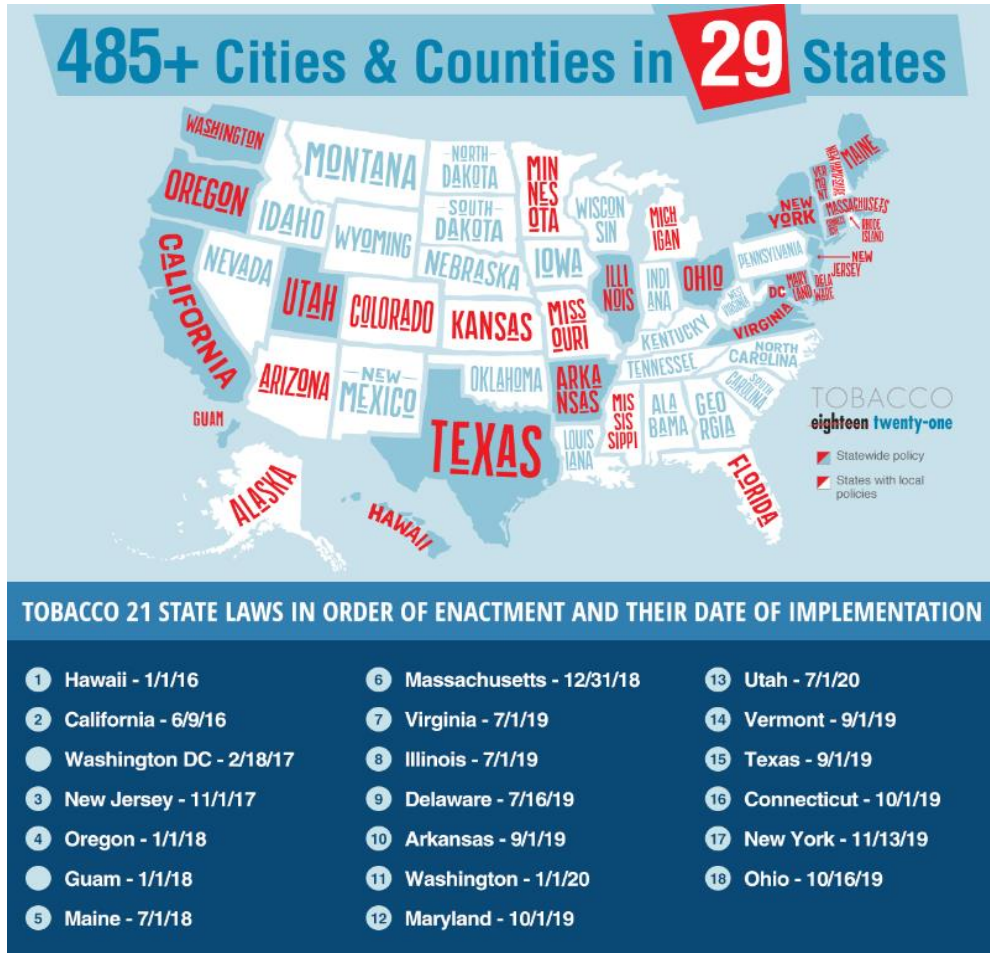
# What Is the Science On Raising Tobacco Sales Age to 21?

- The Institute of Medicine released a national report in 2015.
  - ✓ reduce the smoking rate by 12 percent
  - ✓ reduce smoking-related deaths by 10 percent
  - ✓ Improves maternal, fetal, and infant outcomes
    - 223,000 fewer premature deaths
    - 50,000 fewer deaths from lung cancer
    - 4.2 million fewer years of life lost
    - Prevent 286,000 pre-term births and 4000 cases of Sudden Infant Death (SIDs) if implemented nationwide





# Tobacco 21 Policies



- Applies to the sale not the possession
- Simplifies ID checks for retailers
- Plan for compliance checks, signage, retailer education
- Plan for licensing

for



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# Tobacco Retailer Licensing

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- Enables identification of businesses selling tobacco to consumers
- Helps prevent sales to minors
- Retailers selling tobacco products must comply with relevant laws or risk losing the privilege of selling these products.

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# Data on Tobacco Price Policies

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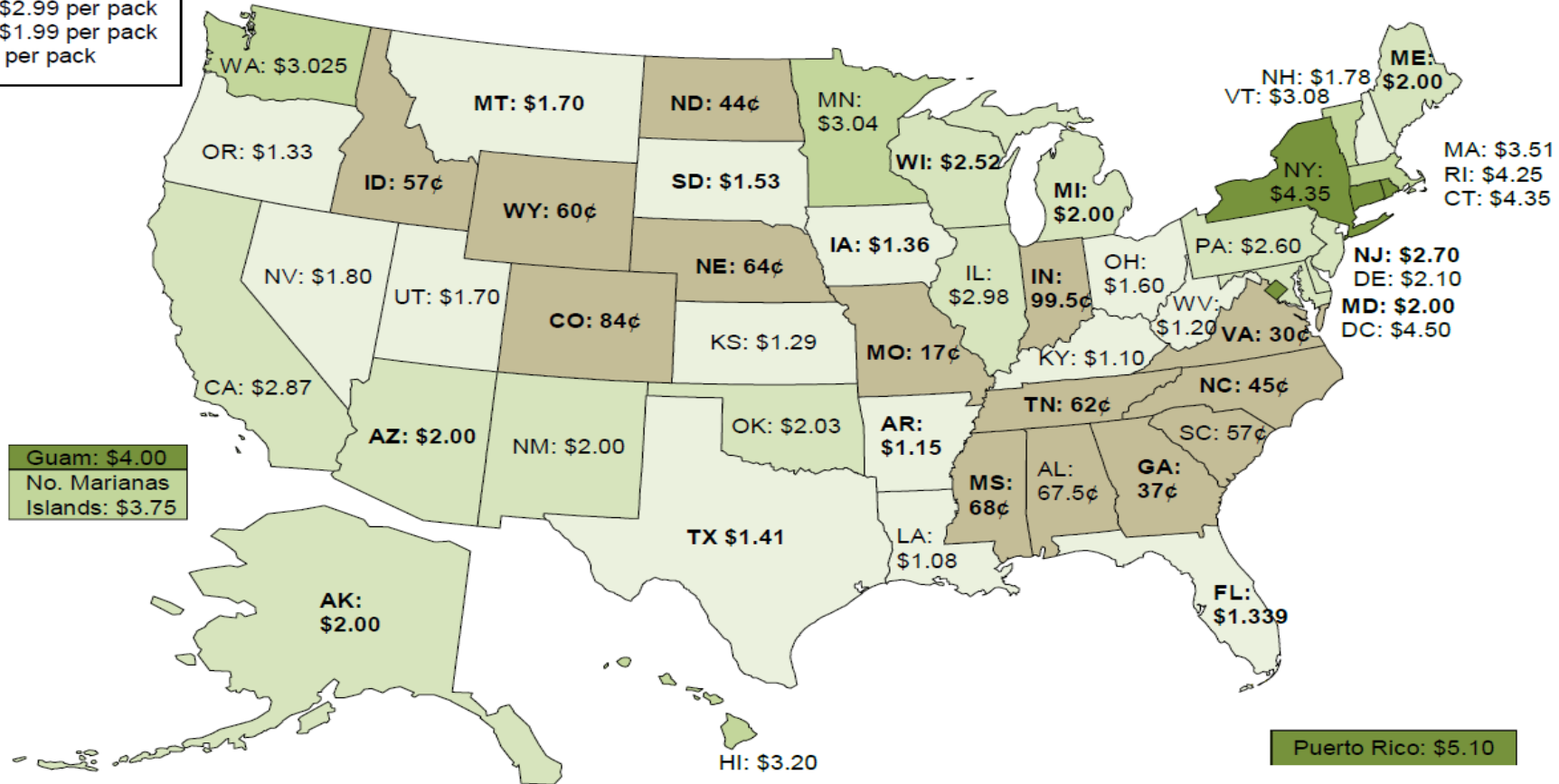
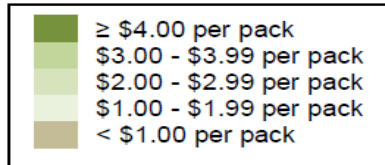
Tobacco tax increases are effective in reducing smoking and other tobacco use, especially among kids

- **Every 10% increase in price, decrease in smoking by about 7% among youth and 4% overall**
- NC is 47<sup>th</sup> in the nation for cigarette tax at \$0.45 per pack.
- NC taxes e-cigarette liquid at 5 cents per ml
- NC law preempts local governments from increasing tobacco taxes

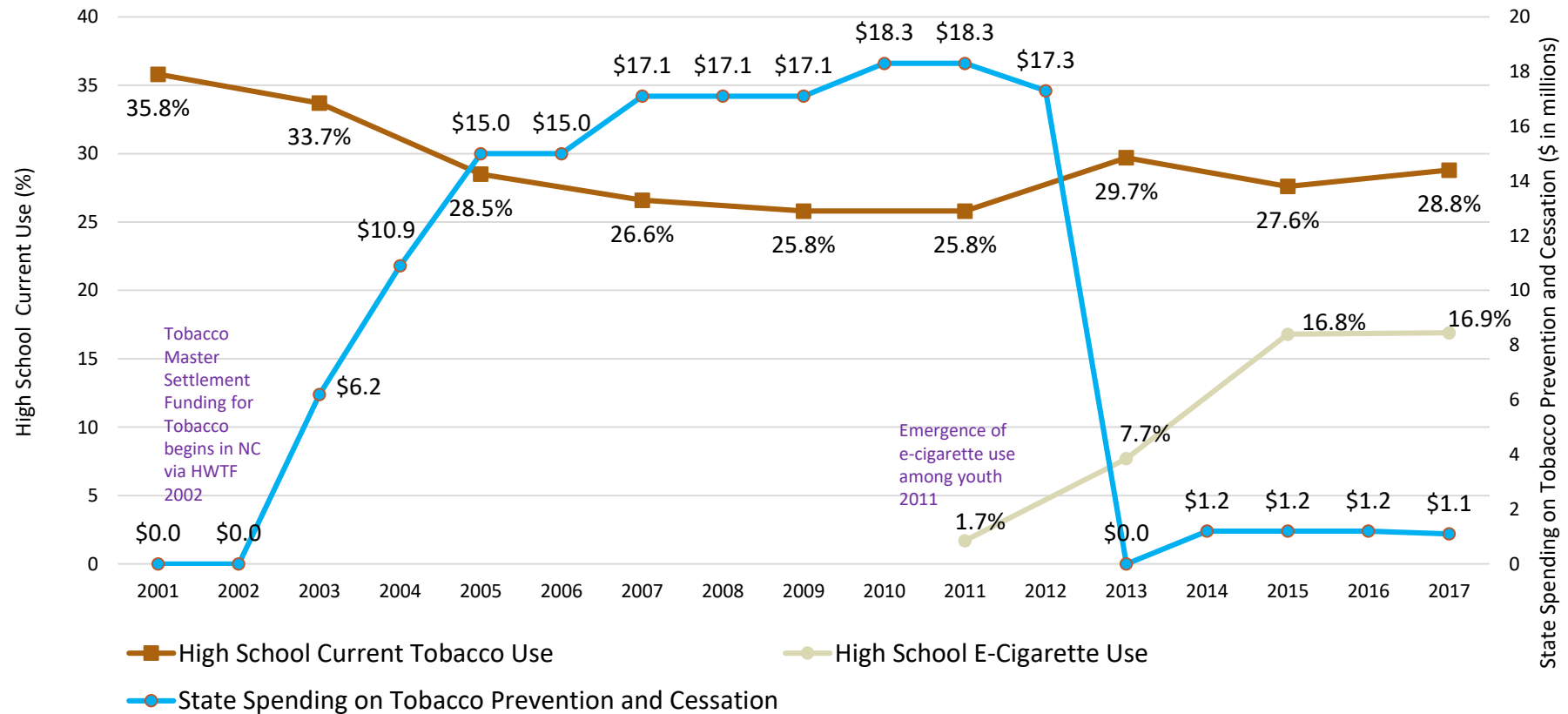


## MAP OF STATE CIGARETTE TAX RATES

Average State Cigarette Tax: \$1.81 per Pack



## High School Tobacco Use and State Spending on Tobacco Prevention in North Carolina 2001-2017



Since 2001, North Carolina has received an average of **\$149,825,874 per year** from the Tobacco Master Settlement Agreement

# U.S. Surgeon General Advisory Recommendations

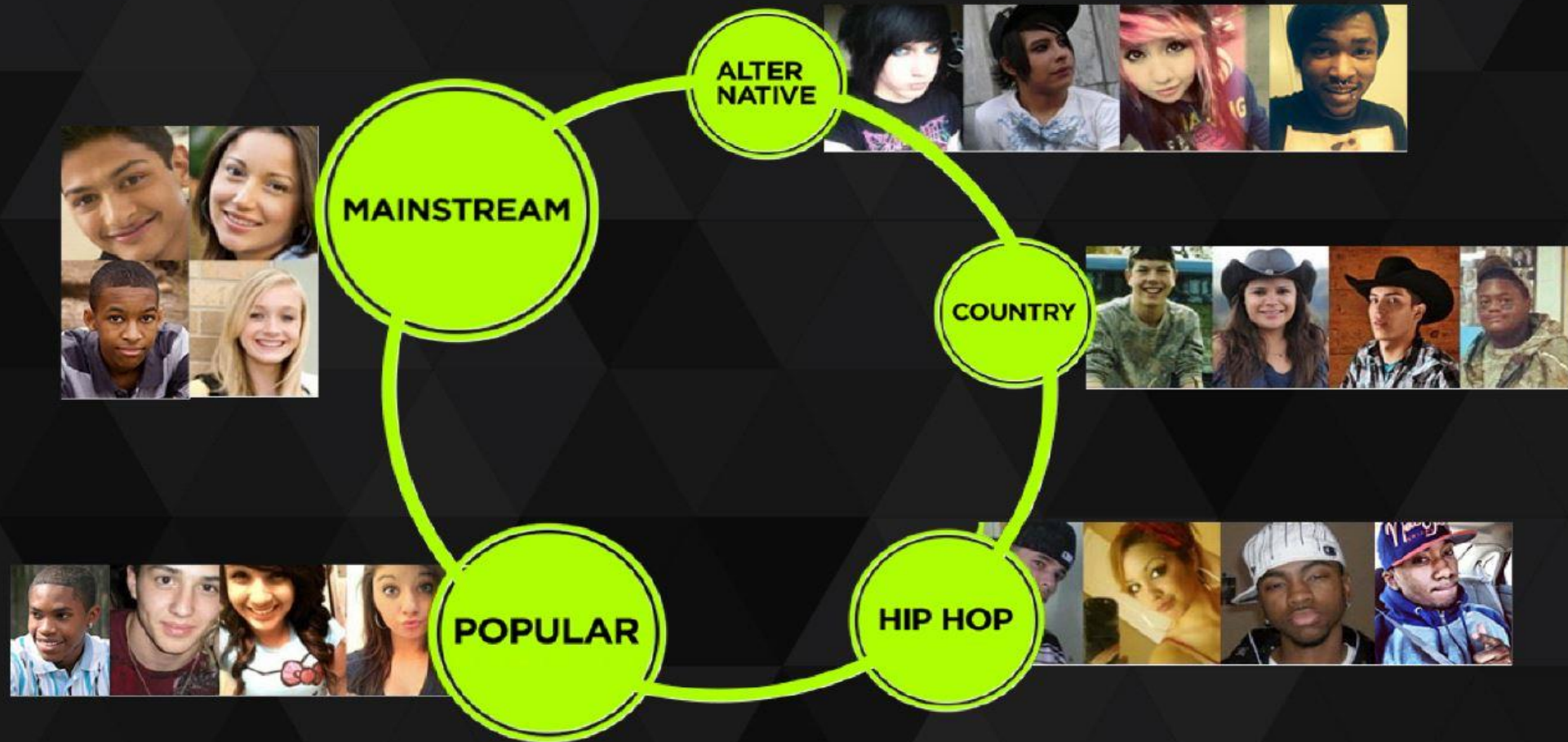
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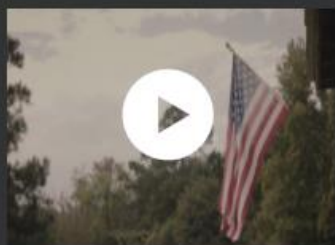


# THE FIVE TEEN PEER CROWDS

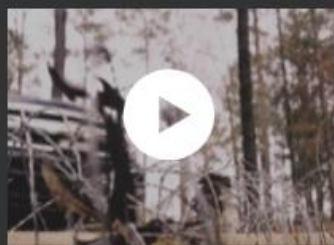


# DOWN AND DIRTY

A tobacco prevention campaign targeting high-risk teens that associates Country values with a tobacco-free lifestyle.



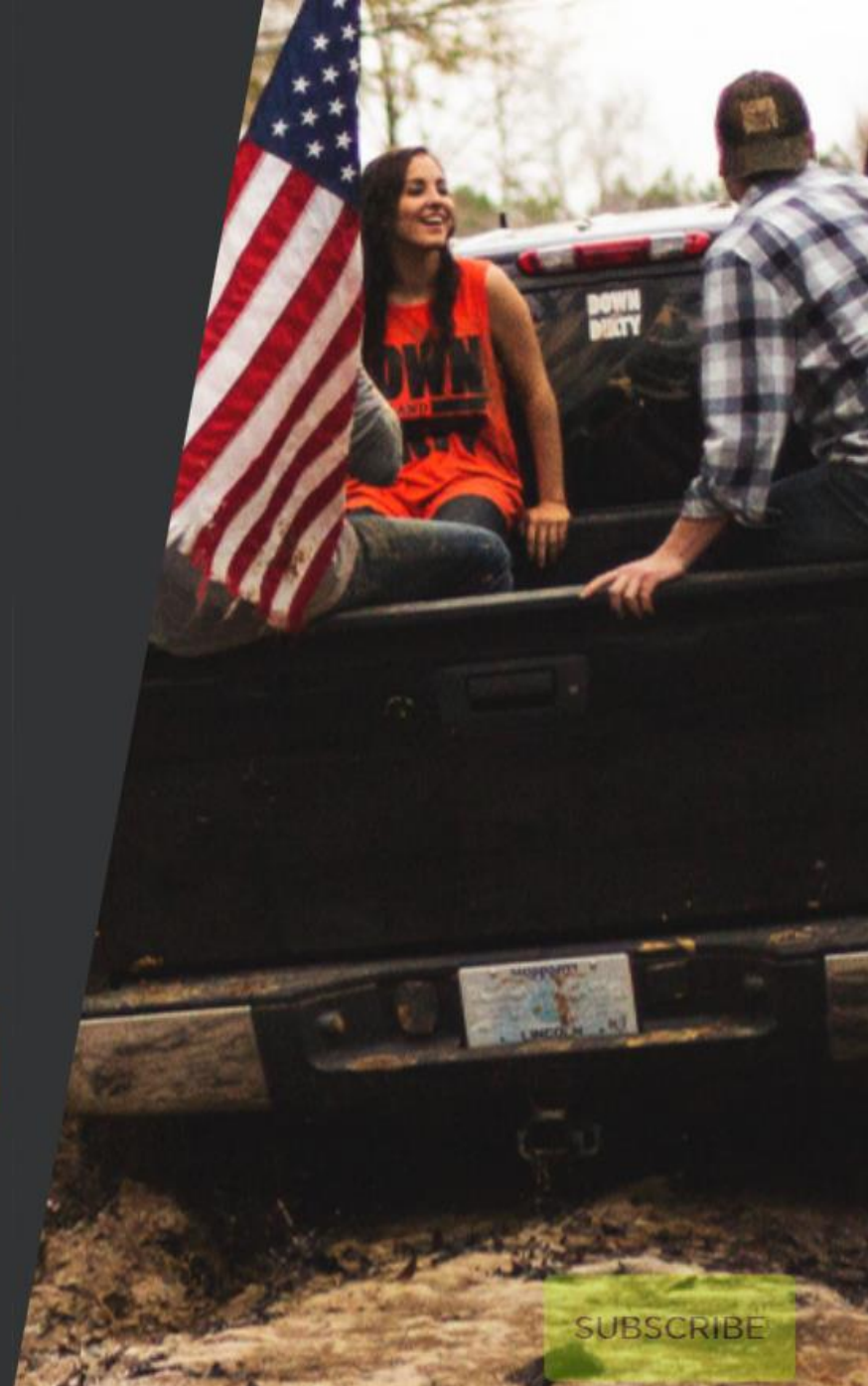
LOOKIN' OUT



COMMON SENSE



NO FIX FOR DIP



# U.S. Surgeon General Advisory Recommendations

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# NC Preemptive Language

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**§ 14-313. Youth access to tobacco products, tobacco-derived products, vapor products, and cigarette wrapping papers.**

(e) .....no political subdivisions, boards, or agencies of the State nor any county, city, municipality, municipal corporation, town, township, village, nor any department or agency thereof, may enact ordinances, rules or regulations concerning the sale, distribution, display or promotion of (i) tobacco products or cigarette wrapping papers on or after September 1, 1995, or (ii) tobacco-derived products or vapor products on or after August 1, 2013. This subsection does not apply to the regulation of vending machines, nor does it prohibit the Secretary of Revenue from adopting rules with respect to the administration of the tobacco products taxes levied under Article 2A of Chapter 105 of the General Statutes.



# FDA Announcement—September 11, 2019

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- FDA intends to finalize a compliance policy in the coming weeks
- Prioritize FDA's enforcement of the premarket authorization requirements for non-tobacco-flavored e-cigarettes, including mint and menthol, clearing the market of non-tobacco-flavored e-cigarette products.
- The FDA plans to share more on the specific details of the plan and its implementation soon.



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*Modules for tobacco and nicotine education*

